Jeff T. Graves

Education 2007 - 2013 Colorado School of Mines

Masters of Engineering, Geological Engineer

1994 - 1997 University of Colorado Denver, CO

Golden, CO

Bachelor of Science, Geology

1993 - 1994 Metropolitan State College Denver, CO

1991 - 1993 Colorado State University Ft. Collins, CO

Civil Engineering

Professional experience

February 2016 - Current State of Colorado Denver, CO

Director, Office of Active and Inactive Mines

 Responsibilities include supervision and guidance of staff of environmental protection specialists, mine safety trainers, and support personnel in accomplishing the missions of the Inactive Mine Program (IMP), the Mine Subsidence Protection Program, and the Mine Safety and Training Program (MSTP), collectively the Office of Active and Inactive Mines (OAIM); Developing program budgets, reviewing and approving of expenditures reconciling deviations; Participating in preparation of grant applications and budget requests. In conjunction with the Division Director participating in the development of program criteria, policies and goals, identification of issues and development of program processes. development of required legislation and development and execution of the budget. Reviewing and approving expenditures for the office and following all state fiscal guidelines and procedures. Directing staff activities, supervision, overseeing work and evaluating performance on a programmatic level. Evaluating the effectiveness of staff activities in meeting goals of programs, providing direction and development of alternative approaches. Providing technical guidance in the technical aspects of inactive mine reclamation by on -site consultation, evaluation of construction activities, investigation of mine site problems and training of staff.

2010 - 2016 State of Colorado Denver, CO

Senior Project Manager/ Geological Engineer (EPSIV)

- Responsible for supervising, guiding, and assisting a technical team of geologists, engineers, and environmental scientists in the development, cost estimating, contracting, scheduling and completion of mine reclamation and water quality improvement projects; Providing technical liason with other Fedreal and State agencies on project budgets, schedules, and reclamation approches and attendent cost estimates; Monitoring and oversight of construction workmanship, technical design, and quality of work products;
- Providing team oversight and review of project budgets, bidding documents, construction closeout reports, and reviewing and authorizing changeorders and invoices for contracted reclamation work;
- Developing grant requests and technical specifications and bidding documents for innovative new approaches and technologies for inactive mine-site reclamation,

including underground tunnel bulkheading and grouting programs, and subsurface mine investigation;

Specific projects and highlights:

Pennsylvania Mine Investigations and Bulkhead Construction: Acted as senior project manager and engineer for development of drilling and subsurface investigation. Designed and implemented plan for portal excavation and reopening, underground rehabilitation, construction of multiple hydraulic seal bulkheads.

<u>Standard Mine Investigations:</u> Provided technical oversite and assistance for development of remedial options and implementation of underground investigations and rehabilitation.

<u>Perigo Mine Investigation:</u> Developed and implemented drilling program to investigate remedial options at the Perigo Mine in Gilpin County. Provided project management for drilling program designed to intercept subsurface mine workings.

Technical Presentations:

Fall 2010 – Geological Society of America Conference, *Investigation of Groundwater Inflows into the Commodore Mine Complex.*

Fall 2011 - National Association of Abandoned Mined Land Programs, Undergound Hydrology of the Commodore Mine Complex and Implications for Source Control.

Fall 2015 - National Association of Abandoned Mined Land Programs, Implementing Source Control at the Pennsylvania Mine, Summit County, Colorado.

2001 - 2010 State of Colorado Denver, CO

Project Manager/ Geologist (EPSII)

- Responsible for managing inactive mine closure projects which includes: fieldwork and development, bid document preparation, cost evaluation, construction design and implementation, construction monitoring and inspection, final closeout and report generation. Utilize engineering, surveying and geologic knowledge to select and design appropriate closure methods for various openings, to determine land ownership and to verify that construction plans are implemented appropriately. Work with contractors to schedule projects and ensure that projects are completed on schedule. Work with local communities and landowners to close dangerous openings, provide information and allay fears about the Inactive Mines Program. Serve as member of various community watershed groups to represent the Inactive Mines Program expert on GIS, AutoCad and related issues and needs. Assist in development of specifications book for Inactive Mines Program. Conducted underground hydrogeologic investigations of various historic mines throughout the state of Colorado.
- Specific projects and highlights:

<u>Nelson Tunnel Dewatering Project:</u> Acted as project manager for mine pool dewatering project to investigate groundwater movement within the Commodore Mine Complex. Designed and insured proper implementation of project. Coordinated water sampling. Analyzed data and produced report.

<u>Standard Mine Investigations:</u> Acted as field geologist providing geologic expertise during underground investigations of mine workings. Developed geologic map of mine workings and evaluated geologic conditions effecting groundwater movement within the mine complex.

Henson Creek Reclamation Feasibility Report: Acted as project geologist for field investigations of Henson Creek, Colorado. Conducted multiple weeks of water sampling and geologic site investigations of various abandoned mines within the Henson Creek watershed to establish mine related environmental impacts. Provided geologic expertise for report summarizing mine related impacts to Henson Creek and feasible reclamation alternatives.

<u>National Abandoned Mined Land Conference, Billings, Montana:</u> Presented technical paper on groundwater movement within the Commodore Mine Complex, Creede, Colorado, and implications for source control.

2000 - 2001

Hepworth-Pawlak Geotechnical

Parker, CO

Staff Geologist

- Conducted geotechnical investigations for proposed construction which included borehole logging, site evaluations and mapping, analysis of lab data, drafting, and report writing. Responsible for managing and coordinating drilling for site investigations. Also performed project management of quality control and assurance on numerous construction projects to ensure that design specifications were followed including: drilled pier observation, soil testing, reinforcing steel observation and structural masonry inspection. Worked with onsite contractors to direct work, correct inconsistencies and coordinate for future inspections.
- Specific projects and highlights:

<u>Floyd Hill Landslide/proposed Blackhawk Tunnel</u>: Acted as field geologist during investigations. Logged over 1000' of core, and installed landslide monitoring equipment.

<u>West Golden Development Project</u>: Acted as field geologist directing drilling investigations into the extent of underground coal mining within the project area.

<u>Numerous subdivisions</u>: Conducted geotechnical investigations for the construction of individual homes within numerous subdivisions of the Denver area.

Office expert on post-tension reinforcement inspections

1998 - 2000

Maxim Technologies, Inc.

Denver, CO

Field Engineer

- Conducted geotechnical investigations for proposed construction which included borehole and core logging. Responsible for project management of quality control and assurance on numerous construction projects to ensure that design specifications were met including: drilled pier observation, footing observation, post tension cable observation, reinforcing steel and structural masonry observation. Also performed field testing of concrete, asphalt and soils on various construction projects.
- Specific projects and highlights:

<u>Belvedere Tower:</u> Acted as field engineer and owners representative to insure all reinforcing steel, post-tension reinforcement, concrete, masonry and drilled piers were built according to plans.

13th & Grant: Acted as field engineer and owners representative to insure all reinforcing steel, post-tension reinforcement, concrete and masonry were built according to plans.

<u>Lakewood Commons:</u> Acted as field engineer during excavation and placement of structural fill for all building sites.

Office expert on post-tension reinforcement inspections.

1996 – 1998 Eastern Mountain Sports Denver, CO

Sales Associate

Provided assistance and guidance to customers interested in outdoor activities.

1995 – 1997 Denver Earth Resources Library Denver, CO

Librarian

Consolidated and correlated new and old well log data. Assisted customers in finding various types of geologic information within the library. Filed and maintained thousands of well logs and accompanying documentation.